



**AIRPORT: Bowers Field (ELN)  
ASSOCIATED CITY: Ellensburg  
ARC: B-II  
REGION: South Central**

**AIRPORT DATA AND FACILITIES**

Bowers Field is located in Kittitas County, two miles north of Ellensburg. The Airport has 51 based aircraft, including 45 single-engine, 3 multi-engine piston-powered, 1 turboprop, and 2 helicopters. The latest available data indicate that Bowers Field experienced 28,728 annual operations.

The Airport has two runways. Runway 7-25 is 5,590 feet long, 150 feet wide, and has an asphalt surface. Runway 25 has a GPS non-precision approach. Runway 11-29 is 4,300 feet long, 150 feet wide, has a concrete surface, and is equipped with pilot controlled medium intensity runway lights. Vertical guidance to Runway 29 is provided by visual approach slope indicators. Runway 29 is also equipped with an omni-directional approach lighting system and runway end indicator lights. VOR or GPS-A and VOR or GPS-B non-precision approaches provide guidance to the Airport, but not a specific runway.

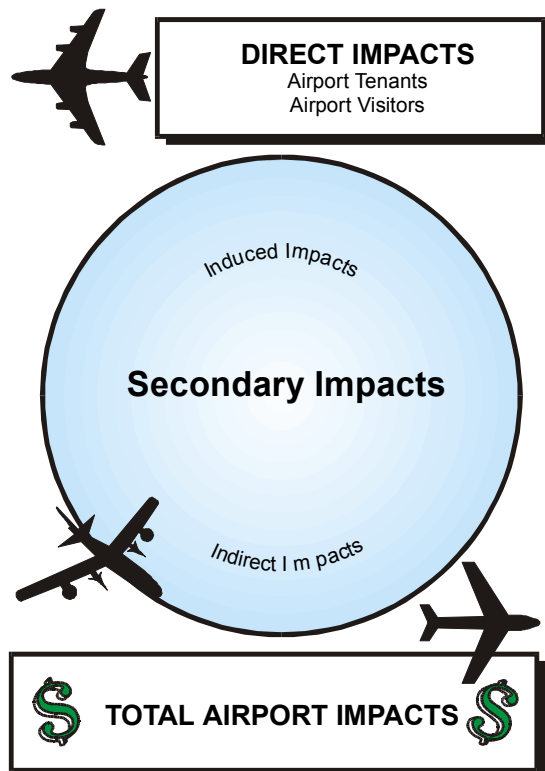


**ECONOMIC IMPACTS**

The economic impacts of Washington's airports were calculated using a methodology, which has evolved over the past decade and is nationally recognized as the standard for conducting economic impact studies of airports. The methodology is consistent with analytical models used by the Federal Aviation Administration (FAA), and employs the use of direct survey information and an input/output model (IMPLAN) as developed by the U.S. Department of Commerce to determine multipliers specific to the state of Washington for "secondary" economic impacts.

Types of Economic Impact - This study identified and examined those aviation activities at the public use airports in Washington that created economic impacts. These impacts are generated in three ways: **1) Direct**, **2) Indirect**, and **3) Induced Effects**. Combined, the three impact types yield the total economic impacts of an airport, as described below:





### **DIRECT ECONOMIC IMPACTS**

These economic impacts occur as a consequence of providing aviation services. These impacts usually occur at the airports, and comprise the financial expenditures by firms which carry passengers (air carrier, air charter or air taxi) or cargo; firms which serve the air carrier and general aviation functions (airport tenants); governmental agencies which support aviation; ground transport firms; and others. In every instance, the impacts include only expenditures where the recipient is located within each airport's service area.

The sole aviation related-business located at the Bowers Field Airport is Midstate Aviation, Inc. General aviation operational activity at the airport accounts for nearly 6,100 passengers and visitors. The total combined direct economic output of airport patrons, passengers and visitors, as well as

the airport tenant to the airport was \$3,209,806. These first-round expenditures at the airport account for seventy-three (73) jobs with combined wages of approximately \$1,181,886.

### **INDIRECT ECONOMIC IMPACTS (Secondary Impact)**

These economic impacts occur as a result of the use of aviation service. They include the regional expenditures made by air passengers who visit the region (at hotels, restaurants, ski facilities, etc.); expenditures by the region's residents associated with their use of aviation; and expenditures by firms having economic activity which is dependent on the airport. These indirect economic impacts accounted for \$733,218 of indirect output while providing approximately eleven (11) jobs with an estimated \$244,938 in indirect wages.

### **INDUCED ECONOMIC IMPACTS (Secondary Impacts)**

The "indirect" and "direct" impacts represent increases in regional final demand. Such increases do not represent total economic impact; there is also a "multiplier" effect. This multiplier effect comprises the local value of money as it circulates through the local economy and as individuals or firms associated with airport business buy goods and services in the local economy. Induced impact for the Bowers Field Airport was \$810,545 while providing approximately thirteen (13) jobs with an estimated \$254,321 in induced employee compensation. Each airport's total economic impact is the sum of the three types of impacts.





## TOTAL ECONOMIC IMPACTS

The total economic impacts across the state were quantified by adding together the direct, indirect and induced impacts for each airport, and interpreting, comparing, and presenting the results.




The output of the IMPLAN model enabled the presentation of total economic impacts by airport in terms of three economic impact measures: 1) jobs (employment); 2) earnings (payroll), and; 3) economic activity (output). Each of these was determined based on individual multipliers per industry categories. In each case, total impacts include the aviation sector itself, as well as the "multiplier effect" of the aviation sector. The impacts were estimated using Year 1998 data.

All three indicators of economic impact are useful; however, the monetary measures should not be added together, as discussed below:

- **Jobs (Employment)** - The number of employees who are employed in the aviation industry, plus the aviation-oriented share of those that are employed in sectors that support the air passenger (hotels, restaurants, etc.) plus those employed in the industries included in the multiplier effect impacts. The number of jobs attributable to an industry is always greater than simply those in the industry itself, due to the "re-spending" of money. Total employment impact was approximately 97 jobs.
- **Labor Earnings (Payroll)** - The sum of the wages and salaries to all employed persons that the aviation industry pays, directly or indirectly, to deliver the output of final aviation demand. Earnings Impacts are always included in the Economic Activity totals, so they should not be summed with the Economic Activity impact. Earnings are a very conservative proxy for "value added." Earnings may be greater or less than the Direct and Use values depending on the industry type. Total earnings impact generated by Bowers Field was \$1,681,144.
- **Economic Activity (Sales Output)** - The value of the aviation final demand (aviation or airport service), plus the "multiplier" effect (the sum of all of the intermediate goods and services needed to produce the aviation final demand, plus the induced impacts of increased household consumption). Total economic activity equals the sum of intermediate demands, consumption demand, government demand, investment demand, and net export demand. Economic Activity is always larger than both the Direct and Use values because it includes the multiplier effect. The total economic impact generated by the Bowers Field Airport totals at \$4,753,569.





|  | Direct<br>Impacts                       | + | Indirect<br>Impacts                     | + | Induced<br>Impacts                      | = | Total<br>Impacts                              |
|--|---|---|---|---|---|---|---|
| <b>Jobs<br/>(Employment)</b><br>        | Number of Jobs<br>Supported             |   | Number of Jobs<br>Supported             |   | Number of Jobs<br>Supported             |   | Total Number<br>of Jobs<br>Supported          |
|  | 73.4                                    |   | 10.9                                    |   | 12.6                                    |   | 97.1  |
| <b>Labor Earnings<br/>(Payroll)</b><br> | Annual Salary<br>Supported              |   | Annual Salary<br>Supported              |   | Annual Salary<br>Supported              |   | Total<br>Annual Salary<br>Supported           |
|  | \$1,181,86                              |   | \$244,938                               |   | \$254,321                               |   | \$1,681,144                                   |
| <b>Economic<br/>(Sales Output)</b><br>  | Contribution to<br>Economy<br>(Dollars) |   | Contribution to<br>Economy<br>(Dollars) |   | Contribution to<br>Economy<br>(Dollars) |   | Total Contribution<br>to Economy<br>(Dollars) |
|  | \$3,209,806                             |   | \$733,218                               |   | \$810,545                               |   | \$4,753,569                                   |

## SUMMARY

On an annual basis, Bowers Field Airport's tenant and its visitors in Kittitas County, Washington contribute the following total annual economic benefit:

|   |  |  |
|---|--|--|
| <b>Jobs<br/>(Employment)</b><br> | <b>Labor Earnings<br/>(Payroll)</b><br> | <b>Economic Activity<br/>(Sales Output)</b><br> |
| Total 97.1  | Total \$1,681,144  | Total \$4,753,569  |

